

**FIRST-SIDE DUAL-LAYER OPTICAL DATA STORAGE DISK
AND METHOD OF MANUFACTURING THE SAME**

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Abstract

An optical data storage disk includes a central substrate and on each side of the substrate a pair of metal/alloy recording layers separated by a transparent layer, preferably made of a photopolymer resin. Thus the disk includes a total of four recording layers. The disk is a "first-side" disk, in the sense that the laser beam used to read and write data enters the disk from the same side as the layer to be read or written, i.e., the laser beam does not pass through the central substrate. The disk is manufactured by a process that includes coating the inner metal/alloy layers with the photopolymer resin in liquid form, embossing the data for the outer metal layers on the photopolymer resin coatings with a transparent stamper, and then curing the photopolymer resin by directing UV radiation through the transparent stamper.

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